

DOCUMENT RESUME

07699 - [C3188295] (Restricted) *Released 12-11-78*

[Bureau of the Census' Procedures for the 1980 Decennial Census]. GGD-79-7; B-78395. November 9, 1978. 3 pp. + 2 enclosures (14 pp.).

Report to Rep. William Lehman, Chairman, House Committee on Post Office and Civil Service: Census and Population Subcommittee; by Elmer B. Staats, Comptroller General.

Issue Area: Statistical and Paperwork Implications of Non-Federal Data (3100); Accounting and Financial Reporting (2800).

Contact: General Government Div.

Budget Function: Commerce and Transportation: Other Advancement and Regulation of Commerce (403).

Organization Concerned: Bureau of the Census; Department of Commerce.

Congressional Relevance: House Committee on Post Office and Civil Service: Census and Population Subcommittee. Rep. William Lehman.

For the 1980 Decennial Census of Population and Housing, the Bureau of the Census plans to spend more than four times the \$222 million it spent for the 1970 census, without assurance that there will be an appreciable improvement in the data collected. More than \$300 million of the estimated increase is attributable to inflation and to a larger workload because of the increased population. The remainder is for procedures that the Bureau hopes will reduce the population undercount for minorities and improve the quality and usefulness of the data. Because census data affect the distribution of billions of dollars in Federal funds, there has been great pressure for the Bureau to increase the statistical visibility of various segments of the population. The budgeting for the decennial census is, in some cases, based on inaccurate or inadequate data, and the costs for certain decennial projects are not accurately recorded. The Bureau determined that it would be better to purchase a new mailing list for the 1980 census than to incur the costs and processing problems of updating the 1970 list. The Bureau has used the 1970 mailing list for intercensal surveys, but there is no estimate of savings from this use. (RRS)

RESTRICTED — Not to be released outside the General Accounting Office except on the basis of specific approval by the Office of Congressional Relations.

COMPTROLLER GENERAL OF THE UNITED STATES

WASHINGTON, D.C. 20548



B-78395

NOVEMBER 9, 1978

Released 12-11-78

8295

The Honorable William Lehman
Chairman, Subcommittee on
Census and Population
Committee on Post Office
and Civil Service
House of Representatives

Dear Mr. Chairman:

In response to your letter of March 14, 1978, we reviewed the Bureau of the Census' planning, budgeting, and accounting procedures and practices for the 1980 Decennial Census of Population and Housing. As requested, we also inquired into whether the substantial saving the Bureau expected from its investment in commercial mailing lists for the 1970 census materialized.

For the 1980 census, the Bureau plans to spend more than four times the \$222 million it spent for the 1970 census, without assurance that there will be an appreciable improvement in the data collected. The Bureau's estimates plus anticipated inflation indicate that the 1980 census will cost about \$1 billion. More than \$300 million of the estimated increase is attributed to inflation and to a larger workload because of the increased population. The remainder is for procedures that the Bureau hopes will (1) reduce the population undercount--primarily for minorities--experienced in prior censuses and (2) improve the quality and usefulness of the data.

In each U.S. census there has been an undercount of the population. For example, the Bureau estimated that the undercount rate was 2.7 percent (3.1 million persons) for the 1960 census and 2.5 percent (5.3 million persons) for the 1970 census. The rate of undercount for blacks was much higher, 8 percent (1.6 million persons) in 1960 and 7.7 percent (1.9 million persons) in 1970. In a previous report (GGD-76-72, May 5, 1976), we concluded that the prospect for substantial gains in coverage rates is doubtful.

GGD-79-7
(27506)

Because census data affects the distribution of billions of dollars in Federal funds, there has been great pressure for the Bureau to increase the "statistical visibility" of various segments of the population. In response to this pressure the Bureau is making a concerted effort to cope with the undercount problem, particularly the disproportionate rate of undercount among minorities experienced in prior censuses. However, in view of the uncertainty of the benefits to be obtained from the procedures designed to improve the data collected and the high costs involved, we believe that the appropriate committees of the Congress should carefully review the Bureau's plans before providing the funds requested.

The Bureau's budgeting and accounting practices need improvement. The budgeting for the decennial census, in some cases, is based on inaccurate or inadequate data, and the costs for certain decennial projects are not accurately recorded.

In regard to the possible saving from the Bureau's investment in mailing lists for the 1970 census, the Bureau determined that it would be better to purchase a new list for the 1980 census than to incur the costs and processing problems of completely updating the 1970 list. However, the Bureau has used the 1970 mailing list for intercensal surveys. There is no estimate of the saving from this use. Also, the Bureau plans to use portions of the 1970 list to supplement the 1980 list.

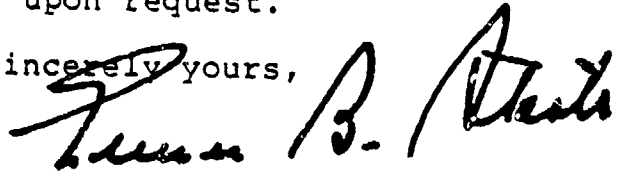
- - - -

Enclosed is more detailed information on the Bureau's plans, budgeting, and accounting for the 1980 census with particular emphasis on the procedures planned to reduce the undercount. We have also included a detailed analysis of the estimated cost of the 1980 census.

In this review we examined the Bureau's cost estimates, accounting records, and such documents as evaluation reports relating to the 1980 census. We also interviewed Bureau of the Census and Department of Commerce officials. At your request, we did not take the additional time to obtain formal agency comments on matters discussed in this report. We did, however, obtain the views of agency representatives in conferences and have considered their views in preparing the report.

As agreed with your office, we plan no further distribution until 30 days from the date of this report unless you publicly announce its contents earlier. At that time we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "James B. Acheson". The signature is fluid and cursive, with the first name "James" written in a larger, more prominent script than the last name "Acheson".

Comptroller General
of the United States

Enclosures - 2

BUREAU OF THE CENSUS PLANNING, BUDGETING,
AND ACCOUNTING FOR THE 1980 CENSUS

INTRODUCTION

Article I, section II of the U.S. Constitution requires the taking of a decennial census. The primary reason for the census is to determine the number of representatives each State shall have in Congress.

Today, data developed from the census is also used as a basis for the distribution of many billions of dollars in Federal funds through general revenue sharing to States, counties, and cities, and for grants funding public works, job training, education, etc. Consequently, inaccurate counts within geographic areas and population groups can create inequities. Census data is further used as (1) a benchmark for subsequent collection of many kinds of data and (2) the best source of small area data.

The first census in 1790 was restricted to a few population questions. About 4 million persons were counted. More recent censuses have also included questions on economic characteristics and housing. The Bureau expects to count about 220 million persons in the 1980 Decennial Census.

Planning for a decennial census begins a number of years before the actual population count. For the 1980 census, the planning began in fiscal year 1974 when \$714,000 was appropriated. About \$212 million has been appropriated for planning and pretesting and other preliminary work through fiscal year 1979, or about 23 percent of the total estimated cost of \$920 million for the 1980 Decennial Census.

SHOULD THE CENSUS COST \$1 BILLION?

Does the Government have to spend \$1 billion ^{1/} for the 1980 census? The reported cost of the 1970 census was \$222 million. Inflation, together with an increased workload, accounts for about half of the difference

^{1/}Bureau estimates show \$920 million, which include the Government salary adjustment in October 1977, but do not provide for the October 1978 salary adjustment or any future cost increases due to inflation.

between the cost of the 1970 census and the estimated cost of the 1980 census. Bureau estimates show that the 1980 census, if done in the same way as the 1970 census, would cost approximately \$553 million.

What then accounts for the other \$367 million? The Bureau ascribes the additional cost to improvements which can be divided into three basic categories: (1) improved procedures directly aimed at obtaining a better population count than in the prior census (\$166 million), (2) changes in field staff management, many of which also are directed at improving coverage (\$120 million), and (3) improvements in the quality of the data, some to meet new legal requirements. See enclosure II for a detailed listing of the Bureau's expected improvements.

For the 1970 census the Bureau reported spending \$187 million for the same type of census made in 1960 and \$35 million for improvements. The coverage improvements cost about \$11 million and the remaining \$24 million was spent for such things as additional data. The Bureau reported spending \$106 million for the 1960 census or \$0.59 per capita as compared to \$1.06 per capita for the 1970 census. Both of these per capita costs are substantially less than the over \$4 per capita estimated for the 1980 census, even after allowance is made for inflation. The table below shows the real growth in the cost of the census since 1940.

<u>Census year</u>	<u>Total cost</u>	<u>Converted to 1978 dollars (note a)</u>		<u>Percent increase in per capita cost over prior census</u>
		<u>Total cost</u>	<u>Per capita cost</u>	
(millions)				
1940	\$ 33.0	\$148.0	\$1.12	-
1950	67.7	176.9	1.18	5
1960	106.2	225.6	1.25	6
1970	221.6	359.0	1.72	38
1980	b/920.0	920.0	4.09	138

a/Conversion based on the Consumer Price Index.

b/Estimated on basis of current dollars at February 1978.

What price improved coverage?

What will the \$166 million for coverage improvements buy? and will it be worth it? In an earlier report to the Chairman, House Committee on Post Office and Civil Service (GGD-76-72, May 5, 1976), we concluded that the prospect for substantial gains in coverage rates is doubtful for the 1980 census. We recommended that the Bureau devote increased effort, if necessary, to distribute the undercount to State and metropolitan areas.

The Bureau estimated the undercount in the 1970 census at 2.5 percent or 5.3 million persons. It credited the improved procedures with decreasing the undercount by 1.1 percent or 2.3 million persons at a cost of about \$11 million. A disproportionate part of the undercount applied to blacks. In the 1970 census the Bureau estimated that of the 5.3 million persons not counted, 3.4 million were white and 1.9 million were black. The undercount rate for blacks was 7.7 percent and for whites was only 1.9 percent.

The Census Bureau believes it should make whatever efforts are necessary and feasible to help reduce the disproportionate undercount. Coverage improvements, however, come only in small increments and are very costly. The Bureau plans to use complex procedures, all without certainty that the gains in the count will be of the anticipated magnitude.

The issue of costs and benefits for the accuracy of the census was addressed in hearings before your predecessor subcommittee prior to the 1970 census. A member of the subcommittee asked the then Bureau Director:

"You mention the possibility of asking for increased appropriations above the \$182 million--\$20 or \$25 million additional--to increase the accuracy of the coverage of the census. It would appear to me that you are proposing approximately 12 percent increase in your appropriations to pick up, maybe, an additional 2 percent or less of accuracy. Is there not a point of diminishing return in the utility of the census itself?"

The Director responded:

"There very definitely is, and that is one of the really sticky questions that we certainly welcome views of this committee on, and the Appropriations Committee certainly will have a definite

point of view on this. But how much additional resources should you put in for getting a fairly small percentage of people? Certainly at some point this gets to be so costly per unit added that everyone would say it should be rejected."

Many of the planned coverage improvements overlap since they are aimed at the same potentially missed persons. The Bureau recognizes this but believes it is necessary to compensate for limitations in the individual procedures. The major improvement procedures are discussed below.

Use of name lists from independent records

About \$30 million is expected to be spent on independent records to help reduce the disproportionate rate of the minority undercount. Lists of names of primarily black and Spanish/Hispanic males obtained from sources independent of the census enumeration will be compared to the names obtained from the enumeration. The independent sources include State driver's license files, lists generated by local community interest groups, and alien registration files.

The estimates of both costs and benefits are extremely speculative. Much of the cost experience was derived from the Travis County, Texas, pretest. Bureau officials believed these pretest costs were generally improperly recorded and the costs for the independent records operation were commingled with costs of other operations.

The use of independent records was also tested at a special census of Pima County, Arizona, and in the pretests for the decennial. These tests indicated that a small percentage increase in the population count might result. One of the Bureau's technical groups projected that 900,000 persons might be added to the national population count at a cost of \$34 per person. However, the group did not have a high degree of confidence in the validity of the projection.

Community services program

The community services program is designed to develop and maintain strong two-way communications with members of minority populations through local minority organizations. About 180 community services specialists are to be hired specifically for the decennial census, primarily to establish and maintain working relationships with local minority organizations. The program's major objectives are to

- inform local groups of the importance of the census data to them and their community and how to obtain and use the data,
- solicit information from these groups regarding potential local counting problems, and
- stimulate the groups' active participation and support for the 1980 census field operations.

The Bureau estimates that \$15.6 million will be spent on the community service program during the 1980 Decennial Census, a \$13.8 million increase over the amount spent during the 1970 census. Although the program has been substantially increased since 1970, Bureau officials said it could not be determined whether the program had increased the mail response or reduced the minority undercount in the three decennial pretests.

Although the census will be taken in the spring of 1980, the Bureau plans to retain 60 of the 180 community service specialists through September 30, 1981, and 24 through September 30, 1982. The Bureau believes these extensions are necessary for program continuity. The estimated costs for fiscal years 1981 and 1982 approximate \$3 million.

Check of potentially misclassified vacants and deletes

In the 1980 census, the Bureau estimates it will recheck 13 million housing units reported as vacant. The current estimate of \$920 million includes \$16 million for this recheck. However, the Bureau has tentatively increased its estimate for this procedure to \$43 million because the original procedure designed for the recheck did not turn out to be as effective as anticipated in the census pretests. The Bureau believes this procedure might add 3 million to the population count, at a cost of \$14 per person added.

During the 1970 census, the Bureau instituted a systematic review of a national sample of 15,000 housing units that had been originally classified as vacant by enumerators. Individual area counts were adjusted as a result of this procedure. The Bureau added approximately 1 million people to the count as the result of this check, but it could not provide cost data for this procedure.

Precanvass of addresses in city-type areas

The prec canvass is a procedure where enumerators canvass all structures, checking actual housing units to update purchased mailing lists. This procedure is designed to add missing units and to delete addresses no longer in existence. During the 1970 census, this operation was limited to the inner city areas of 17 large cities; whereas, in the 1980 census the operation will be extended to more areas. The Bureau estimates that the cost of the prec canvass in 1970 was \$365,000 and that about \$15.5 million will be spent for this activity during the 1980 Decennial Census. A Bureau staff study estimated that prec canvassing would add 3.5 million to the population count.

Improved prelisting procedure in rural areas

Commercial address lists will not be available outside the metropolitan areas for developing the address register. For rural areas and small urban places, census enumerators will have to perform a 100-percent canvass to prepare the initial list of addresses. This list will then be subjected to a number of reviews by post office and census personnel to try to improve completeness of coverage.

The Bureau estimates that \$32.5 million will be spent to prelist about 32 million addresses during the 1980 census. For the 1970 census the Bureau estimated (actual costs not available) that it spent \$1.9 million--\$2.8 million in 1978 dollars--to prelist about 7.2 million addresses. The unit cost for the additional addresses to be prelisted in the 1980 census is higher because the areas involved have a lower population density.

Review of population counts by local officials

In 1980 the Bureau plans to allow local officials to review preliminary counts at various geographic levels, down to the block level if applicable, while the district offices are still open. Prior to the census counts, address counts on the Bureau's mailing lists will be provided for the officials' review. At the completion of the enumeration, population and housing counts will be given to the local officials. Correction of errors identified in the process of following up the local officials' reviews can then be made before shipping the census documents and closing the district office. The procedure will require keeping the district offices open longer and may entail area recanvassing. The Bureau estimates this procedure to cost about \$18 million during the 1980 census.

Expanded undercount evaluation
estimate program

The Bureau estimates that about \$16 million will be spent on a large-scale postenumeration survey to develop estimates of the undercount for States and major metropolitan areas. The Bureau intends to interview 250,000 households several months after the census taking is completed. The Bureau will match the results of this postenumeration survey with the results of the census and information derived from social security files.

In the postenumeration survey, enumerators will contact the sample households in selected geographic areas. The Bureau estimates that this survey will cost about \$50 per household, or \$12.5 million, based on cost experience from a recently completed Bureau survey. The remaining costs will be for working with the social security files and publishing the data.

Much of the matching will be done manually and as a result it will be a time-consuming project. The results will not be published for 1 to 2 years. To develop undercount estimates for areas smaller than major metropolitan areas, a much larger sample would be required. Because of the time and resources needed to work with a larger sample, the Bureau has decided not to expand the scope of its survey.

A postenumeration survey has some of the basic problems experienced in the regular census. Within enumerated households, persons tend to be missed because of their desire not to be counted. They may be fugitives from the law, illegal immigrants, or violators of building occupancy requirements. Also, many persons are drifters who are not attached to a specific household. A person omitted from the census for these causes will be in the same situation at the time of a postenumeration survey and is, therefore, very likely to be omitted from the survey. Consequently, the Bureau believes that a number of different procedures, including the use of social security records, need to be used to combat the undercount problem.

What will the Bureau derive from the
investment in the other improvements?

The Bureau estimates that about \$201 million will be spent on the other improvements. These can be divided into two basic categories: (1) \$120 million for changes in field staff management and (2) \$81 million for improvements in

quality of data. The procedures in the first category cannot be translated to measurable benefits; however, they may indirectly improve the population count. The chart below shows examples of these improvements.

<u>Improvements</u>	<u>Amount</u> (millions)
Improved district office administration	\$45.0
Improved regional office administration	5.9
Expanded field quality control program	23.8
Improved payroll processing	11.0
Improved recruiting operations at the district office	8.0
Lower crew leader/enumerator ratios	9.7

According to the Bureau, the incremental costs shown above represent improved procedures in specific areas of deficiencies identified in the administration of the 1970 census or in pretest operations. For example, in 1970 there were instances in which temporary employees were not paid on time, resulting in work stoppages, severe criticism, and increased employee turnover. The improved, in-house payroll procedures are intended to avoid a repeat of this problem in 1980.

Many of the improvements in the second category can be associated with discernable statistical benefits, some of which are applicable to legal requirements. For example, the Bureau will include (1) a Spanish/Hispanic-origin item on all questionnaires at an estimated cost of \$6.4 million and (2) an income item on 50 percent of the questionnaires distributed to places with populations of 5,000 or less at an estimated cost of \$5.9 million. The former will be used to collect and publish data on Spanish/Hispanic-origin population to satisfy several Federal statutes, and the latter will provide improved data for general revenue sharing for small communities.

NEED FOR IMPROVED BUDGET AND ACCOUNTING PRACTICES

The budget and accounting records are not fully effective as management tools because (1) budgets in some instances are based on inaccurate or inadequate data and (2) the accounting records do not accurately reflect the planning costs for the census.

Estimated costs are based on inadequate data

Estimates prepared for the overall census and for portions of it lack precision because they are based on inadequate data, and as a result the budgets lose their value as a planning mechanism and as a fund control. In 1975 the Bureau estimated that the 1980 census would cost about \$450 million. ^{1/} In February 1977 the Bureau increased the estimate to \$565 million. This estimate, introduced into the March 1977 appropriations hearings, had little documentary support. The estimate was developed by adjusting the \$221.6 million cost of the 1970 census for inflation, larger workload, increases for coverage improvement, and reductions for processing efficiency. However, these adjustments did not include studies of productivity for enumerators and clerks, which make up a sizable portion of decennial census costs.

In August 1977 the Bureau revised the estimate to \$874 million, partly on the basis of detailed estimates of operations prepared by the Field Division in June 1977. The Field Division, which collects the data for the census, accounted for the major portion of the estimated costs, about \$515 million. The Field Division estimate made in June 1977 was based primarily on personal judgment and 1970 data. In February 1978 the \$874 million was increased to \$920 million (thus increasing the Field Division portion to \$539 million) and was introduced in the 1979 appropriations hearings. The increase was based primarily on the Government salary increase in October 1977.

Although the amount of the Field Division estimate has increased significantly, the Bureau is maintaining an overall ceiling of \$920 million for the census. The Field Division prepared additional estimates after June 1977. The most recent estimate examined by our office, dated March 1978, was for \$589 million, an increase of \$74 million over the June estimate or an increase of about \$50 million in the field portion of the \$920 million. This estimate was prepared using measured standards for some field operations and the results of the census pretests for such factors as mail response and failed edit rates.

In view of the estimated costs of the improvements and the substantial increase in the current field estimate,

^{1/}Bureau estimates in conformance with Office of Management and Budget guidelines do not include factors for anticipated inflation.

it is unlikely that the \$920 million estimated ceiling for for the 1980 census will be sufficient to include all planned improvements.

Budget estimates for the headquarters divisions, such as the Population and Decennial Census Divisions, are based on judgments by division officials. There is no quantifiable support for the estimated number and grades of personnel needed to support the census.

Need for more timely and reliable
internal cost estimates

The Bureau's divisions do not prepare timely or reliable internal cost estimates for decennial operations. As a result, the Bureau's ability to control program operations and analyze operational difficulties is impaired. Budgets for decennial pretests and other planning projects frequently were submitted after the projects were started. Consequently, funds were obligated and expended before the budget estimate was received.

Moreover, the estimates for the pretests were incomplete. For the Travis County pretest the Field Division's budget analyst said:

"Numerous cases of no budget line items for operations performed during the test. Some of these operations were not foreseen and some, though foreseen were inadvertently omitted from the budget."

Many project estimates are routinely adjusted during the year to keep pace with actual and expected costs. For example the fiscal year 1978 budget for program planning and direction changed five times after the original estimate. Official cost statements show only the current cost estimate and the costs incurred. As a consequence, the cost statements provide a distorted view of the operations and cannot be used to identify problem areas.

Inaccurate cost accounting for
planning the census

The Bureau's accounting records should fairly present the total costs for the 1980 Decennial Census. Most of the costs will be incurred by the Field Division and will be budgeted and readily identifiable to the decennial census. However, the Bureau's accounts do not accurately reflect costs for the planning phase of the census. Following are examples of costs inaccurately charged.

Nineteen persons assigned to the Decennial Census Division are budgeted against an interfund (overhead) project, and as a result their salary and associated costs are charged to overhead. 1/

The cost of work performed by community service representatives at the pretest and dress rehearsal projects have been charged to overhead rather than to decennial projects. This resulted from the Bureau's policy of charging the time of permanent community service representatives to overhead regardless of what projects they work on.

The Organization and Management Systems Division in 1976, 1977, and 1978 performed work measurement studies to develop production standards for decennial operations. Although the work was for the 1980 Decennial Census, the salary and associated costs, as well as most of the travel costs, were charged to overhead.

Since costs charged to overhead are redistributed to operating projects, the failure to properly charge the decennial projects causes the decennial projects to be undercharged and other projects to be overcharged.

Some of the Population Division's time charges to the decennial census were incorrect. For example, the time for an executive and his secretary was charged to the decennial census, although the executive was not working on a decennial project and his 8-person staff was charging its time to a nondecennial project. In another case, an individual's time was charged to the decennial census although he was working on a survey of income for the Department of Health, Education, and Welfare. He said that his secretary prepared his time distribution report, and he was unaware of what project was being charged.

MAIL CENSUS: NO SAVING BUT BETTER
COVERAGE AND DATA QUALITY

The Bureau probably did not realize the saving it anticipated by using the mail census in 1970, nor is it likely that it will save by using this type of census in 1980. However, as compared to the conventional method, a mail census does provide increased control over the households

1/The Bureau's budgeting and accounting system includes a number of interfund projects in all divisions.

being counted and should provide better coverage and data quality.

A mail census incorporates an address register and the mailing out and mailing back of the census questionnaires. The register identifies the mailing address of the households to be counted and serves as a control list of the nonrespondents. In the conventional method, which was used prior to the 1970 census, enumerators would visit every household. In the mail census, enumerators contact only those households which do not properly fill out or mail back the questionnaires. In 1970 the Bureau used the mail census for about 60 percent of the households and found that it provided better coverage than did the conventional method and improved data. The Bureau will use the mail census for about 95 percent of the households in 1980.

The mail address register requires substantial costs to compile. For the 1970 census, the Bureau purchased commercial mailing lists covering about 50 percent of the national population. These lists cost about \$800,000, a small portion of the register's total cost. Significant additional costs are required for the procedures needed to update and supplement the commercial list, such as the prec canvass and prelist previously discussed and postal checks.

Several years before the 1970 census, the Bureau anticipated a substantial saving by using the mail census. As the time got closer to the actual census, Bureau officials became less optimistic about the saving. However, the Director of the Bureau testified before your predecessor subcommittee in 1967 that the Bureau would effect a \$10 million saving on future work as a result of the capital investment in the mail address register.

In regard to the possible savings from the Bureau's investment in mail lists for the 1970 census, it appears that these will come largely from reduced costs for selecting samples of housing units for intercensal surveys. Over the decade of such use, the Bureau claims 2.5 million housing units will have been sampled in this way. Bureau officials state that without the use of the 1970 address register for sampling purposes, it would not have been possible to respond promptly to mandates for large-scale surveys such as the Survey of Income and Education.

In planning for the 1980 census, the Bureau considered updating the 1970 list rather than purchasing a new address list. However, based on cost comparisons and processing

problems, the Bureau concluded it was more advantageous to purchase a new list. In 1978 after reviewing mailing lists from potential vendors, the Bureau found that the lists for portions of certain very large metropolitan areas were inadequate. Consequently, the Bureau is now planning to use the 1970 mail address register to supplement the 1980 lists.

February 1978

Key Numbers for 1980 Decennial Census
(Dollar amounts in millions)

	Latest amt. Prior to Pay Act	Oct. '77 Pay Act	Trav. Inc.	Rev. Total		Latest amt. Prior to Pay Act	Oct. '77 Pay Act	Trav. Inc.	Rev. Total
Cost of 1970 Decennial	221.6	...	...	221.6	Improvement in field mgt. (continued):				
<u>Adjustments</u>					Expanded field quality control program.....	22.3	1.3	.2	23.8
Workload increase (20%).....	44.3	...	...	44.3	Improved reg. office admin.....	5.5	.4	...	5.9
Atypical workload increase.....	22.7	...	...	22.7	Lower crew leader/enumerator ratios.....	9.0	.5	.2	9.7
Pay Act increase.....	100.7	22.3	...	123.0	Merge operation for decentralized offices.....	2.5	.1	...	2.6
Other field pay increases.....	19.6	1.4	...	21.0	Improved payroll processing in regional office.....	5.5	.4	...	5.9
Travel, postage and transp. increases.....	20.1	...	1.8	21.9	Improved payroll processing in district office.....	4.8	.3	...	5.1
Printing price increases.....	21.8	...	...	21.8	Equip. for improving payroll & pop. & hsg. (R.O.).....	7.5	...	...	7.5
Other price increases.....	21.8	...	...	21.8	Improved recruiting operations - Dist. off.....	7.4	.5	.1	8.0
Geog. joint stat. agreements for GBF/Dime work.....	10.0	...	...	10.0	Sort incoming mail in D.O. rather than Post Office.....	1.5	...	...	1.5
Field office rental price increase.....	26.4	...	...	26.4	Improved training.....	2.2	...	...	2.2
Rental of processing office space.....	17.4	...	...	17.4	Guard services in district offices.....	3.0	.2	...	3.2
GSA space costs.....	.7	...	...	.7	<u>Improvement in data content and publications:</u>				
Base census.....	527.1	23.7	1.8	552.6	P.L. 94-171 (reapportionment/redistricting program).....	32.7	1.4	.5	34.6
<u>Improvements</u>					Spanish origin item on 100 percent basis.....	5.3	.2	...	5.5
<u>Coverage improvements:</u>					Income on 50% sample in small places.....	6.0	.3	.1	6.4
Community services program.....	13.0	.8	...	13.8	Follow-on surveys.....	5.5	.3	.1	5.9
National services program.....	1.1	...	...	1.1	Framework for sample surveys.....	5.6	.2	.2	6.0
Increased staff and adv. act. for minority groups.....	1.1	...	...	1.1	Expanded data use program.....	5.2	.2	...	5.4
Use of Spanish language questionnaires.....	2.1	.1	...	2.2	Block data for cities of 10,000 and over.....	2.1	.1	...	2.2
Special program for Indian reservations.....	5.2	.3	...	5.5	<u>Improvement in geographic operations:</u>				
Expanded undercount eval./est. program.....	15.0	.8	.1	15.9	Imprvmt. geog. mat. thru use of geog. specialists in reg. off.	7.8	.2	.1	8.1
Precanvass of addresses in city type areas.....	14.6	.8	.1	15.5	BAA survey for places under 2,500.....	3.1	.1	.1	3.3
Improved prelisting procedures in rural areas.....	30.7	1.5	.3	32.5	GBF's for areas not in local program.....	2.8	.1	...	2.9
P.O. check of prelisted addresses.....	3.1	...	...	3.1	Improve GBF quality.....	1.2	...	...	1.2
Check of potential misclassified vacants and deletes.....	15.0	.8	.2	16.0	<u>Improvement in processing:</u>				
Use of team enumeration.....	2.1	.1	...	2.2	Decentralization of non-computer processing operations.....	21.2	1.1	.1	22.4
Expansion of post office movers check.....	1.1	...	...	1.1	Improved quality control operations.....	5.2	.3	.1	5.6
Review of population counts by local officials.... (note a)	7.7	.4	.1	8.2	Improved coding verification system.....	4.5	.2	...	4.7
Keep dist. off. open longer to review pop. challenges (note a)	9.3	.4	.1	9.8	Expansion of place of work coding.....	5.5	.3	...	5.8
Questionnaire assistance and casual count.....	1.3	.1	...	1.4	Expansion of general coding.....	2.0	.1	...	2.1
Use of name lists from independent records.....	27.6	1.5	.2	29.3	Improved place of work coding and reference material	3.0	.2	...	3.2
Increased general public information campaign.....	3.0	.2	...	3.2	<u>Other improvements:</u>				
Increased minority public information campaign.....	3.0	.2	.1	3.3	General improvement in census of outlying areas.....	15.3	.5	.1	15.9
Preparation of lists for nonhousehold sources cov. check...	1.0	...	...	1.0	Experimental programs as part of the census.....	3.0	.1	...	3.1
<u>Improvement in data collection:</u>					Expan. in size and no. of ops. for pretest and dress rehearsal	5.0	.3	.1	5.3
Improved district office administration:	113.5	6.4	.5	120.4		7.3	.1	...	7.4
Centralized offices.....	15.9	1.1	...	17.0	Cur. ent Plan.....	874.6	41.3	4.3	920.2
Decentralized offices - urban.....	16.2	1.1	...	17.3					
Decentralized offices - rural.....	8.9	.5	...	9.4					
Conventional offices.....	1.3	...	...	1.3					

Notes: Estimates are in current dollars

a/Both procedures relate to the review of population counts by local officials.

Source: This chart was prepared by the Bureau of the Census.